III. Gather Data

A. Ozone Eaters

- Click on the "Common Questions" site.

1. How is ozone distributed in the atmosphere?

_____

_____

2. What is the "ozone hole"?

_____

_____

_____

3. Besides CFCs, what other molecules destroy ozone?

_____

_____

- Click "Back" to get back to the OAR Ozone Gather Data site.

B. Proof of Damage

- Click on the "Evidence" site.
- Look at the figure and answer the following question.

1. As the concentration of chlorine rises, what happens to the concentration of ozone?

_____

- Click "Back" to get back to the OAR Ozone site.

C. Natural vs. Artificial

- Click on the "Chlorine Sources" site.

1. Since nature produces chlorine all the time, why do only artificially produced chlorine molecules cause trouble?

_____

_____

_____

_____

2. What percent of the chlorine in the stratosphere can be attributed to nature? _____

- Click "Back" to get back to the OAR Ozone Gather Data site.

- Click "Forward" at the bottom of the screen.

D. Total Ozone Loss

- Click on the "October Ozone Hole" site.
- Scroll down to the graph.

1. Compute the percentage of ozone in Antarctica in 1993 compared to the amount of ozone we had in October in 1957.

- Estimate the total ozone in 1957 and record it below.
  _____ Dobson units

- Estimate the total ozone in 1993 and record it below.
  _____ Dobson units

- Divide the 1993 value by the 1957 value.
- Move the decimal two places to the right to get the percentage of ozone that we have now.

- Click "Back" to get back to the OAR Ozone Gather Data site.

E. Sunburn Effects

- Click on the "Ultraviolet Radiation" site.

1. If the concentration of ozone decreases 30%, how much additional UV radiation will reach the surface of the earth?
   _____

- Click "Back" to get back to the OAR Ozone Gather Data site.

F. Future Outlook

- Click on the "Ozone Treaty" site.

1. What is expected to happen to the ozone layer during your lifetime?

_____

_____

- Click "Back" to get back to the OAR Ozone Gather Data site.

G. Unusual Suspect

- Click on the "Rural Ozone" site.

1. What problems are associated with ozone at ground level?

_____

_____

2. How are we producing ozone at ground level?

_____

_____

3. How can we decrease the ozone concentrations at ground level?

_____

_____

4. What changes in our lives can we make to reduce ozone concentrations at ground level?

_____

_____

_____

- Click "Back" until you get back to the OAR Ozone site main screen.

- Click "Application."